

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): A ceramic heater comprising:

a disc-shaped ceramic substrate made of a single sintered body, the ceramic substrate having a disk shape and an overall thickness of approximately between 0.5 mm and 5 mm, the ceramic substrate having a heating surface and a bottom surface on an opposite side of the heating surface, the heating surface being configured to face a semiconductor wafer, the bottom surface having an inner portion and a peripheral portion therein; [[and]]

a first resistance heating element device comprising a plurality of resistance heating elements formed[[:]] on [[a]] the bottom surface of the ceramic substrate; ~~or inside the ceramic substrate, in the peripheral portion; and~~

a second heating device comprising a plurality of resistance heating elements formed on the bottom surface of the ceramic substrate in the inner portion

~~wherein:~~

~~the resistance heating element composed of two or more circuits being divided in the circumferential direction is arranged in the outermost periphery of said ceramic substrate; and~~

~~further the resistance heating element composed of a different circuit is formed in the inner portion of said resistance heating element being arranged in the peripheral portion.~~

Claim 2 (currently amended): The ceramic heater according to claim 1, wherein the resistance heating elements of the first and second heating devices comprise a plurality of circuits and a relationship of the following expression (1) holds between the total number n of the circuits of the first and second resistance heating element devices provided for said ceramic substrate and the diameter r (mm) of said ceramic substrate:

$$n \geq r^{1.94} \times 0.5 \times 10^{-4} \dots (1).$$

Claim 3 (currently amended): The ceramic heater according to claim 1, wherein said ~~resistance heating elements of said first and second resistance heating element composed of a different circuit has~~ devices comprise separate circuits and the circuits comprise one of a concentric circles like or a spiral shape circles, spirals and a combination thereof.

Claim 4 (currently amended): The ceramic heater according to claim 1, wherein said ~~resistance heating elements of the first resistance heating element composed of a different circuit is a combination of: a resistance heating element having a concentric circles like or a spiral shape; and resistance heating elements being divided in the circumferential direction~~ device comprise separate circuits divided in quadrants and said resistance heating elements of the second heating device comprises circuits comprising one of a concentric circles, spirals and a combination thereof.

Claim 5 (currently amended): ~~The [[A]] ceramic heater comprising a disc-shaped ceramic substrate having a diameter of 200 mm or more and a resistance heating element composed of two or more circuits formed: on a surface of the ceramic substrate; or inside the ceramic substrate, wherein: at least one of circuits of said resistance heating element is divided in the circumferential direction; at least one of circuits of said resistance heating element contains a concentric circles like or spiral pattern; and further the total number of the circuits of said resistance heating element is 3 or more~~ according to Claim 4, wherein the ceramic substrate has a diameter of at least about 200 mm.

Claim 6 (currently amended): ~~The [[A]] ceramic heater comprising a disc-shaped ceramic substrate and a resistance heating element composed of two or more circuits formed: on a surface of the ceramic substrate; or inside the ceramic substrate, wherein: at least one of circuits of said resistance heating element is divided in the circumferential direction; at least~~

~~one of circuits of said resistance heating element contains a concentric circles like or spiral pattern; and further~~ according to claim 1, wherein the resistance heating elements of the first and second heating devices comprise a plurality of circuits and a relationship of the following expression (2) holds between the total number n of the circuits of said resistance heating element first and second heating devices and the diameter r (mm) of said ceramic substrate:

$$n \geq r^{1.94} \times 10^{-4} \dots (2).$$

Claim 7 (currently amended): The ceramic heater according to claim 1, wherein said ~~ceramic heater is used at~~ first and second heating devices are configured to operate at a temperature of 100 to 800 °C.

Claim 8 (currently amended): A ceramic heater according to claim 1, ~~wherein said ceramic heater is equipped with:~~ further comprising:

at least one [[a]] temperature-measuring element for measuring the device configured to measure a temperature of said ceramic substrate;

a control unit for supplying which supplies electric [[power]] powers to each of said resistance heating element composed of a plurality of circuits first and second heating devices;

a memory unit for memorizing [[the]] data of [[a]] the temperature measured by said temperature-measuring element device; and

an operation unit for calculating the electric [[power]] powers required for said resistance first and second heating element devices from said temperature data measured by said temperature-measuring element device,

wherein said ceramic heater being constituted such that respectively different control unit supplies the electric powers are supplied to the plurality of circuits of said resistance

~~heating element~~ such that the resistance heating elements in the first and second heating devices receive the electric powers, respectively.

Claim 9 (currently amended): The ceramic heater according to claim 1, wherein said ~~ceramic substrate~~ single sintered body comprises a nitride ceramic or a carbide ceramic.

Claims 10-15 (canceled)

Claim 16 (new): The ceramic heater according to claim 1, further comprising at least one temperature measuring device, wherein said ceramic substrate has at least one bottomed hole extending from the bottom surface toward the heating surface and the at least one temperature measuring device is provided in the at least one bottomed hole.

Claim 17 (new): The ceramic heater according to claim 16, wherein said at least one temperature measuring device is at least one thermocouple.

Claim 18 (new): The ceramic heater according to claim 17, wherein said at least one temperature measuring device provided in the at least one bottomed hole is fixed with at least one of a gold braze, a silver braze, a ceramic adhesive and a heat-resistant resin.

Claim 19 (new): The ceramic heater according to claim 1, further comprising a supporting device configured to receive the semiconductor wafer over and apart from the heating surface and hold the semiconductor wafer.

Claim 20 (new): The ceramic heater according to claim 19, wherein said supporting device comprises a plurality of supporting pins positioned to receive and hold the semiconductor wafer over and apart from the heating surface.

Claim 21 (new): The ceramic heater according to claim 19, wherein said at least one bottomed hole has a depth which is one half of or less than one half of the overall thickness of the ceramic substrate.

Claim 22 (new): The ceramic heater according to claim 1, further comprising an insulating layer covering the resistance heating elements of the first and second heating devices.